

IN THE CLAIMS:

Please cancel claims 1-24, 29 and 30 without prejudice or disclaimer.

Please amend claim 25 as follows:

Subt D¹
B2

25. (Twice Amended) A pre-anneal intermediate structure in the formation of an isolation structure for a semiconductor device, comprising:
a semiconductor substrate having a first surface and a second surface;
at least one [first doped area] p-well and at least one n-well on said substrate first surface; [and]
at least one p-type area within said at least one n-well;
at least one n-type area within said at least one p-well; and
a substantially dopant-free, uninterrupted diffusion barrier layer over said at least one p-well and
said at least one n-well [first doped area] on said substrate first surface.

Please add the following new claims:

Subt D²
B3

33. A pre-anneal intermediate structure in the formation of an isolation structure for a semiconductor device, comprising:
a semiconductor substrate having a first surface and a second surface;
at least one p-well and at least one n-well on said substrate first surface;
at least one doped area within at least one of said at least one n-well and said at least one p-well;
and
a substantially dopant-free, uninterrupted diffusion barrier layer over said at least one p-well and
said at least one n-well on said substrate first surface.

Sub F2

34. The structure of claim 33 further comprising a layer of oxide
between said substrate first surface and said substantially dopant-free, uninterrupted diffusion
barrier layer.

35. The structure of claim 33 wherein said substantially dopant-free, uninterrupted diffusion barrier layer extends over said substrate second surface.

36. The structure of claim 33 further comprising a second substantially dopant-free, uninterrupted diffusion barrier layer over said substrate second surface.

B² conf 42/F3 37. The structure of claim 33, wherein said substantially dopant-free, uninterrupted diffusion barrier layer comprises one of the group consisting of silicon nitride and silicon oxynitride.

Subt D³ 38. The structure of claim 33, wherein said at least one doped area comprises an impurity selected from the group consisting of an n-type impurity and a p-type impurity.

39. A pre-anneal intermediate structure in the formation of an isolation structure for a semiconductor device, comprising:
a semiconductor substrate having a first surface and a second surface;
at least one first doped area on said substrate first surface;
at least one second, differently doped area within said at least one first doped area; and
a substantially dopant-free, uninterrupted diffusion barrier layer over said at least one first doped area on said substrate first surface.

Ans F3 40. The structure of claim 39 further comprising a layer of oxide between said substrate first surface and said substantially dopant-free, uninterrupted diffusion barrier layer.

41. The structure of claim 39 wherein said substantially dopant-free, uninterrupted diffusion barrier layer extends over said substrate second surface.